

AMENDMENTS TO THE CLAIMS

Pursuant to 37 C.F.R. § 1.121 the following listing of claims will replace all prior versions, and listings, of claims in the application.

1. (Previously Presented) An internal antenna for a flat radio device having a signal ground, the antenna comprising:

a monopole-type base element with a feed conductor;

a parasitic element functioning as an auxiliary radiator; and

a single inductive matching element connected between the parasitic element and the signal ground to optimize antenna matching.

2. (Currently Amended) An internal antenna for a flat radio device having a signal ground according to claim 1, the antenna comprising:

a monopole-type base element with a feed conductor, wherein said base element having has a first branch and a second branch, between which branches being an electromagnetic coupling to set the ratio of the fundamental resonating frequency and its nearest harmonic of the base element such that the fundamental resonating frequency falls into frequency range of a first radio system and said nearest harmonic falls into frequency range of a second radio system;

a parasitic element functioning as an auxiliary radiator; and

a single matching element connected between the parasitic element and the signal ground to optimize antenna matching.

3. (Previously Presented) An antenna according to claim 2, wherein a structure constituted of the parasitic element and the matching element has a first resonating frequency arranged to fall into frequency range of the first radio system, and a second resonating frequency arranged to fall into frequency range of the second radio system.

4. (Previously Presented) An antenna according to claim 1, said radio device having a circuit board, and the base element and the parasitic element being substantially on top of one another as viewed along the direction of the normal of said circuit board.

5. (Previously Presented) An antenna according to claim 4, the base element and the parasitic element being rigid conductive wires aside said circuit board as viewed along the direction of the normal of the circuit board.

6. (Previously Presented) An antenna according to claim 4, the parasitic element being a conductive strip on a surface of said circuit board and the base element being a rigid conductive piece.

7. (Previously Presented) An antenna according to claim 4, the base element being a conductive strip on a surface of said circuit board and the parasitic element being a rigid conductive piece.

8. (Currently Amended) An internal antenna for a flat radio device having a signal ground according to claim 1, the antenna comprising:

a monopole-type base element with a feed conductor;
a parasitic element functioning as an auxiliary radiator; and
a single matching element connected between the parasitic element and the signal ground to optimize antenna matching, wherein the matching element being is a wound conductive wire.

9. (Previously Presented) An antenna according to claim 6, the matching element being a conductive strip on a surface of said circuit board.

10. (Previously Presented) A radio device having a signal ground and an internal antenna, comprising:

a monopole-type base element with a feed conductor;

a parasitic element functioning as an auxiliary radiator; and
a single inductive matching element connected between the parasitic element and the radio device signal ground to optimize antenna matching.

11. (Currently Amended) A radio device having a signal ground and an internal antenna, comprising: according to claim 10
a monopole-type base element with a feed conductor;
a parasitic element functioning as an auxiliary radiator;
a single matching element connected between the parasitic element and the radio device signal ground to optimize antenna matching; and
the radio device having a first part and a second part such that these parts can be turned on a hinge one upon another, said antenna being located within the first part.

12. (Previously Presented) An internal antenna for a flat radio device having a signal ground, the antenna comprising:

a monopole-type base element including a feed conductor;
a parasitic element functioning as an auxiliary radiator;
a single matching element connected between the parasitic element and the signal ground to optimize antenna matching; and
the flat radio device includes a circuit board;
wherein the base element and the parasitic element are substantially on top of one another as viewed along the direction of the normal of said circuit board.

13. (Previously Presented) An antenna according to claim 12, wherein the base element and the parasitic element are rigid conductive wires disposed aside said circuit board as viewed along the direction of the normal of the circuit board.

14. (Previously Presented) An antenna according to claim 12, wherein the parasitic element is a conductive strip on a surface of said circuit board, and the base element is a rigid conductive piece.

15. (Previously Presented) An antenna according to claim 12, wherein the base element is a conductive strip on a surface of said circuit board, and the parasitic element is a rigid conductive piece.

16. (Previously Presented) An antenna according to claim 13, wherein the matching element is a conductive strip on a surface of said circuit board.